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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/660,188

09/11/2003

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101340-334-NP

5820

7590

11/28/2007

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EXAMINER

FOUD, HICHAM B

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

11/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/660,188	Applicant(s) MAYHEW ET AL.	
	Examiner Hicham B. Foud	Art Unit 2619	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4 and 14-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 14-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on 09-12-2007 has been entered and considered.

Claims 1, 2, 4 and 14-26 are pending in this application.

Claims 3 and 5-12 have been canceled.

Claims 1, 2, 4 and 14-26 remain rejected as discussed below.

### ***Specification***

2. The amendment filed 09/12/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: In one embodiment, a novel path routing scheme is used to route packets across the fabric, where the fabric has a plurality of switches, each having a plurality of ports. Each switch uses only data from within the packet and its own port count to determine the appropriate output port. There is no need to node or address lookup mechanisms in the switches.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. The abstract of the disclosure is objected to because it recited two embodiments instead of the whole invention. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the

patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

### ***Claim Objections***

4. Claims 1, 2 and 4 are objected to because of the following informalities:

In claim 1, note that claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure, such as by using the term "adapted to". Therefore, claim language following this phrase will not be considered. It is suggested that Applicant remove this term.

Claims 2 and 4 are rejected for their dependency on the objected claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 2, 4 and 14-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims 1, 14 and 18 recite "switch having a plurality of ports, wherein said switch is adapted to receive a packet on one of said plurality of ports, and based solely on said packet field data and the number of said ports, is adapted to transmit said packet on a second one of said plurality of port". The examiner could not find any information anywhere in the original disclosure to support those limitations. The applicant mentioned in the Remarks/Arguments page 11 that the description of these features is found on pages 3-12. However, in these pages, the examiner could not find any support for those features. The applicant needs to be more precise and gives the exact passages from the original disclosure to support the amendment to the claims excluding the new matter introduced in the new abstract.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 14-16, 18 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Droz et al (US2002/0136202) hereinafter is referred to as Droz.

For claims 1, 14 and 18, Droz discloses a method of routing a packet from a source to a destination within a fabric having at least one switch, said switch having a plurality of ports (see Figure 2; element 210; router and 214 input/output ports), said method comprising: encapsulating said packet with a header, wherein said header comprising packet field data (see Figure 2; element 212; wherein 216 is header and 218 is data); transmitting said encapsulated packet from said source to said switch (see Figure 2 element 212); receiving said encapsulated packet by said switch on one of said ports (see Figure 2; LC 22); determining an appropriate output port using said packet field data and the number of said ports (see [0047] lines 5-10); and transmitting said encapsulated packet from said switch via said appropriate output port (see [0047] lines 14-17).

For claims 15 and 16, Droz discloses a system wherein said packet field data comprises a turn pool or bit count and said determining means utilizes said turn pool or said bit count to select said appropriate port (see [0047] lines 8-10; the piece of information (destination address) reads on turn pool or bit count).

For claims 25 and 26, Droz discloses a method wherein further comprising using said turn pool and bit count of said packet received by said destination to create a

second header, used by said destination, to encapsulate a second packet to be routed from said destination to said source (see [0047] lines 8-10; the piece of information (destination address) reads on turn pool or bit count; So, in replying to the source, the new header will exchange the fields, meaning that the new header will have the address of the destination as the source and the source address as the destination).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 4, 13 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Droz.

For claims 2,4, 13 and 19-23, Droz discloses all the subject matter with exception wherein the packet field data comprises a credit length, a bit count, a turn pool, an operation, a PID index, an MTU, an EUI and other claimed field data. However, it is obvious to include or add any field data to the packet data field especially that the packet data field contains reserved bits that are not used and left for the purpose of adding any needed data field that allows adding new features to the packet. Thus, it would have been obvious to the one skill in the art at the time of the invention to add new features to the packet by using those reserved bits that are left empty such as CRC bit for the purpose of adding new functions to the packet like the error detection and having an efficient system.

For claim 24, Droz discloses all the subject matter with the exception of explicitly disclosing a plurality of switches, further comprises repeating said receiving, determining and transmitting steps until said packet reaches said destination. However, it would have been obvious to the one skill in the art at the time of the invention to concatenate as many switches as needed that perform same function as the one taught by the invention of Droz that will repeat the same functions until the packet reaches the destination for the purpose of having a big network that covers long distance.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Droz in view of Higginson et al (WO 94/00937) hereinafter is referred to as Higginson.

For claim 17, Droz discloses all the subject matter with the exception of explicitly disclosing further comprising means to modify said packet field data prior to transmitting said packet. However, Higginson discloses a system wherein the switch modifies the packet before its transmission to the destination by stripping off the header (see Figure 1 elements 30 40 and page 14 lines 24-26). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the method as taught by the invention of Higginson into the method of Droz for the purpose of reducing overhead at the destination and therefore having a fast processing of the packet at the destination.

### ***Response to Arguments***

9. Applicant's arguments filed 09/12/2007 fully considered but they are not persuasive.



10. In page 10 lines 16 to the end of the page, the Applicant argued that "while the use of unused bits to perform additional features is possible and well known, a specific implementation of those bits may still be novel." The specific implementation of those bits is described in the disclosure but not in the claims. The claim language does not describe nor specify how those bits are been used to perform such features. The claims only recite names of those bits. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

#### **Conclusion**

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hicham B. Foud whose telephone number is 571-270-1463. The examiner can normally be reached on Monday - Thursday 10-3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HF

Hicham Foud  
11/21/2007



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